

PATENT  
Docket No. NB 2016.00

# 10A

PS

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Dated: 9/26/02

Name of Person Certifying: Jocelyn L. Lee  
Printed Name: Jocelyn L. Lee

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Ming Fai Chan, et al.

Serial No.: 09/847,525

Filed: May 1, 2001

For: BETA-LACTAM ANTIBIOTICS

**RECEIVED**

Group Art Unit: 1624

OCT 07 2002

Examiner: Berch, Mark L.

TECH CENTER 1600/2900

**AMENDMENT AND RESPONSE TO OFFICE ACTION**

Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

This paper is submitted in response to the Office Action issued by the U.S. Patent and Trademark Office on March 26, 2002 in connection with the above-identified application. A response to the March 26, 2002 Office Action was due June 26, 2002. Enclosed herewith is a petition for a three month extension of time, making the response due September 26, 2002. Accordingly, this response is timely filed.

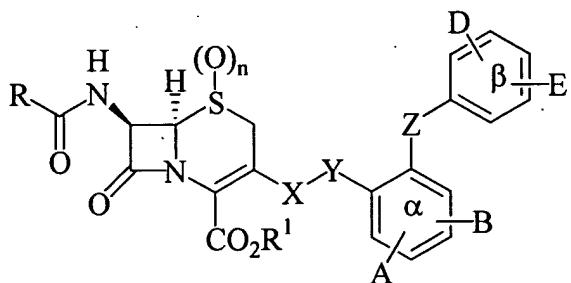
## I. AMENDMENTS

Please amend the subject application as follows:

In the specification:

Please replace the paragraph under ABSTRACT OF THE INVENTION on page 93 as follows:

This invention provides improved beta-lactam antibiotic compounds of the formula:



wherein R, R<sup>1</sup>, X, Y, Z, A, B, D and E are defined herein. The present invention also provides methods for inhibiting the growth of both antibiotic resistant and sensitive microbial infections. It provides a means of taking advantage of a key disease resistance mechanism to activate these drugs locally, and to overcome the resistance phenotype of the microbes. In addition, the invention provides methods for treating a subject infected with an antibiotic resistant microorganism by administering the compounds or compositions of the invention. The present invention also provides a novel synthetic method for the synthesis of the compounds.

In the claims:

Please amend claims 1, 41, 43, 44, 46, 49 and 52 to recite as follows: